

UNOFFICIAL COPY

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

527 CMR 20.00: USE AND MAINTENANCE OR TEMPORARY PORTABLE SPACE HEATING DEVICES AND EQUIPMENT USED IN THE CONSTRUCTION INDUSTRY

Section

20.01: General

20.02: Solid Fuel Salamanders

20.03: Referenced Publications

20.01: General

(1) For the purpose of 527 CMR 20.00 the following words shall have the meanings respectively assigned to them:

Approved, approved by the Marshal.

Employee, an employee who, by training, education, or experience, is capable of performing his assigned work safely and efficiently.

Fuel, Liquid, a flammable liquid in the liquid state consisting of a petroleum base with a flash point of 115°F or higher.

Fuel, Solid, a combustible material in the solid state below its ignition temperature.

Liquefied Petroleum Gas, includes any material which is composed predominantly of any of the following: Hydrocarbons or a mixture of them; propane; propylene; butanes (normal butane or isobutane); and butylenes.

Manufacturer, a heater manufacturer.

Marshal, the State Fire Marshall.

Nationally Referenced Testing Laboratory (NRTL). An organization which tests for safety and lists, labels or accepts equipment or materials and which meets the criteria in 527 CMR 49.00 (Appendix C).

Salamander, a temporary and portable space heating device used for the drying of construction material.

Stability, the ability of a heater to withstand overturning forces.

(2) No salamander or stove for drying any construction material shall be used in any building except under such conditions as may be prescribed by the Board; and no such salamander or stove shall be set upon a wooden floor unless it is raised above the floor at least four inches and set upon brick or other incombustible material in a bed of sand at least two inches thick, spread upon the floor and covering the area of at least two feet in all directions larger than the area of the salamander or stove.

UNOFFICIAL COPY

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

- (3) No salamander, stove, or other portable heater for drying construction material shall be used in any building unless such device has been listed and labeled by an NRTL and approved by the State Fire Marshal.
- (4) Each heater unit shall have permanently affixed to it a conspicuous and permanently legible safety data plate. The data plate(s) shall provide data on:
- (a) Side and top clearances from combustible materials.
 - (b) Minimum air requirements for fuel combustion.
 - (c) Type of fuel to be used and the operating input pressure at the burner.
 - (d) Instructions for lighting, extinguishing, and relighting.
 - (e) Electrical power supply characteristics such as voltage range, amperage, phase, cycle, and type of current.
- (5) Heaters used in the vicinity of tarpaulins, canvas, or similar coverings shall be located a safe distance from coverings and other combustible materials. The coverings shall be securely fastened to prevent ignition of the covering or upsetting of the heater due to wind action on the covering or other material.
- (6) Heaters shall not be moved, handled, or serviced while hot or burning or while component parts are hot to the touch. The data plate described in 527 CMR 20.01(4) or a second conspicuously visible plate shall be labeled with the words:
- DO NOT MOVE, HANDLE, OR SERVICE WHILE HOT OR BURNING.
- (7) The safeguards engineered into the device shall be maintained and repairs shall be performed in accordance with the manufacturer's recommendations. Replacement parts shall be equal to, the equivalent of, or the same as the original heater equipment.
- (8) Heaters, when in use, shall be set level with the horizontal unless otherwise permitted by the manufacturer's markings. The heater shall be designed so as not to tip over when placed on a surface inclined 25° to the horizontal. If equivalent protection and safety is afforded by alternative design, the 25° limitation may be reduced.
- (9) Heaters, when in use, shall be protected to prevent flame extinguishment.
- (10) Salamanders, stoves, or heaters shall be refueled only by a person trained in such operations. Any person intending to utilize any salamander shall obtain a permit from the head of the fire department prior to such use.

20.02: Solid Fuel Salamanders

- (1) 527 CMR 20.02 shall apply to solid fuel, *i.e.*, coal or coke. Wood burning salamanders are prohibited.
- (2) Solid fuel salamanders shall be equipped with a cover designed as part of the unit, to

UNOFFICIAL COPY

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

prevent spillage of burning material in case of tipover.

(3) Each time a salamander is placed in operation it shall be checked to insure that it is functioning properly and its operation shall be checked periodically thereafter. When concentrations of carbon monoxide attain quantities greater than 50 parts per million (0.005 percent) to air volume at employee breathing levels, the salamander shall be extinguished unless additional natural or mechanical ventilation is provided to reduce the carbon monoxide content to permissible limits.

(4) Tests for presence of carbon monoxide shall be made by a qualified person within one hour after the start of each work shift and at least every three hours thereafter. If concentrations of carbon monoxide reach 30 parts per million to air volume, tests shall be made more frequently to determine if there is a continuing increase of carbon monoxide concentration. Records of all tests, including the date, time, results obtained, and person making tests, shall be maintained for a seven-day period.

(5) No person shall be permitted to be within the area being heated by the salamanders except under the following circumstances:

- (a) When tending the salamanders.
- (b) When testing the atmosphere.
- (c) In emergency situations.

(6) No employee shall be permitted to enter the heated area until notification is given to another person located outside. Periodic checks of at least one every 15 minutes shall be made to insure the safety of employees entering the heated area.

(7) When a salamander is being used, the responsibility for its operation and maintenance shall be assigned to a qualified employee. Salamanders shall not be moved or handled while hot or burning or while component parts are hot to the touch.

(8) Fresh air shall be supplied in sufficient quantities to maintain the safety of employees. Where natural means of fresh air supply is inadequate (less than 16% oxygen by volume), mechanical ventilation shall be provided. Particular attention shall be given to confined spaces and pockets where heat and fumes may accumulate and employees may be present.

(9) Only a one-day supply of heater fuel shall be stored inside a building in the vicinity of the salamander. General fuel storage shall be outside the structure. All fuel storage shall be maintained a minimum of 25' from any source of ignition.

20.03: Referenced Publications

Documents or portions thereof that are referenced within 527 CMR 20.00 shall be considered a part of the requirements of 527 CMR 20.00. Refer to 527 CMR 49.00 for a complete listing of all documents referenced in 527 CMR.

UNOFFICIAL COPY

527 CMR: BOARD OF FIRE PREVENTION REGULATIONS

REGULATORY AUTHORITY

527 CMR 20.00: M.G.L. c. 148, §§ 9 and 10.